

REMARKS

This Amendment is prepared in response to the Office action of 13 December 2005 (Paper No. 12062005). Allowance of claims 8 through 14 as set forth in paragraph 7 on page 10 of the Office action is noted with appreciation.

Status of Claims

Claims 1 through 20 were originally filed. By this Amendment, claims 15 through 20 have been canceled without prejudice or disclaimer of their subject matter, and claims 1 and 4 through 7 have been amended. Thus, claims 1 through 14 are pending in the application.

Double Patenting

- A. Claims 1-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of copending Application No. 10/826413.**

The Examiner contends that “[a]lthough the conflicting claims are not identical, they are not patentably distinct from each other because the invention of the pending claims encompasses a similar invention as recited in the copending claims.”

The Examiner states that:

“Both applicants are similarity comprising a Private EV-DO wireless network coupled to a Public EV-DO wireless network included a relay unit, call processor, and session information request signal and generated by the call processor from or to a public network data location register being received between a Private and Public wireless networks.”

The mere presence of similar system components in corresponding claims in both applications is an insufficient basis for a finding of non-obviousness double patenting.

Under current U.S. practice,

“any obviousness-type double patenting rejection should make clear (A) the differences between the inventions defined by the conflicting claims – a claim in the patent compared to a claim in the application; and (B) the reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim at issue would have been an obvious variation of the invention defined in a claim in the patent.”¹

This procedural requirement has not been met here by the mere assertion that Applicant’s

“claim[-s] at issue” both require:

“Private EV-DO wireless network coupled to a Public EV-DO wireless network included a relay unit, call processor, and session information request signal and generated by the call processor from or to a public network data location register being received between a Private and Public wireless networks.”²

In essence, the Examining staff has improperly based this rejection upon an appearance of “similarity”³ in the disclosures of Applicant’s specification, rather than upon the express language of the pending claims when considered in their respective entireties.⁴

¹ *Manual of Patenting Examining Procedure*, 8th Edition, Revision 3 (August 2005), §804, p. 800-21.

² Examiner’s comments, Paper No. 12062005.

³ Examiner’s comments, Paper No. 12062005, page 2.

⁴ The *Manual* expressly forbids the use of the disclosure of the co-pending application as prior art in a determination of non-obviousness double patenting. *MPEProcedure*, 8th Edition, Revision 3 (August 2005), §804, p. 800-21.

Recognizing the patentable distinctiveness of the claims in Applicant's co-pending applications, namely the existence of "the differences between the inventions defined by the conflicting claims" and the absence of evidence of record for "a person of ordinary skill in the art" to "that the invention defined in the claim at issue would have been an obvious variation of" that a corresponding claim in Applicant's co-pending application, this rejection is improper and must be withdrawn. Such action is respectfully urged.

Claim Rejections - 35 U.S.C. §103(a)

- B. Claims 1 through 7 are rejected under 35 U.S.C. §103(a) as being unpatentable over Sayers (US 2003/0186694) in view of Ray (US 2003/0135626), and further in view of Akahane (US 2004/0010617).**

Applicant respectfully traverses this rejection for the following reasons.

Claim 1.

In support of the rejection, the Examining staff argues for its proposed combination constructed according to:

"Sayers teaches a system comprising: a private EV-DO wireless network coupled to a public EV-DO wireless network including a data location register adapted to provide private EV-DO wireless data service (Fig. 1 and Fig. 2, Public and Private Networks); a relay unit adapted to relay a corresponding call connection request signal upon the call connection request signal being received from a terminal entering the private EV-DO wireless network (Fig. 2, Private Wireless Network, element 22-1, and Hub 23); **but is silent on** a call processor adapted to generate a session information request signal with respect to the corresponding terminal upon the call connection request signal relayed from the relay

unit being a first call connection request signal, and to process a call by assigning a traffic channel to the connection terminal according to the received session information upon the session information corresponding to the requested session information request signal being received; and a session information processor adapted to request the session information request signal of the corresponding terminal generated by the call processor from a public network data location register in the public EV-DO wireless network.

However, Ray teaches a system that contains the source access networks that routing the session information back to the target access network, and shared state between the Access Terminal and Access Network, which shared state stores the protocols and the protocol configurations that are used for communication between the Access Terminal and Access Network such as Point-to-Point Protocol (PPP), or Link Control Protocol (LCP) to negotiations for access authentication, and further the physical traffic channel being assigned (Abstract, [0005-0009, 0028, 0034, 0037] of Ray). As Examiner noted that the data location register from public to private network does not need to store the information for the first time. At least two or more times then stored in the Private-Data Location Register (DLR).

However, the combination of Sayers and Ray teach the authentication information service between Private and Public Wireless Network. But is silent on to extract authentication information of the terminal included in the session information of the corresponding terminal received from the public network data location register, to store the received session information of the corresponding terminal in a database upon the extracted authentication information being authentication information of the terminal registered in the private EV-DO wireless network, and to provide the call processor with the corresponding session information.

However, Akahane teaches a request routing system for a

high-quality and low priced data delivery services. Which select the closest router to a user terminal can be set by pre-registering a user network address at the time of contract signing and letting the Request Router to select a router according to the network address, IP routing table, and the like. Another method is to examine the header of an IP packet that stores a data request message from a terminal as a payload, and extract the source IP address from the header, and let the Request Router select a router according to the source IP address, IP routing table, and the like (Fig. 4, and Fig. 17, [0097]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sayers, such that to extract authentication information of the terminal included in the session information of the corresponding terminal received from the public network data location register, to store the received session information of the corresponding terminal in a database upon the extracted authentication information being authentication information of the terminal registered in the private EV-DO wireless network.”⁵

The primary reference cited by the Examining staff to support its proposed combination is Sayers *et al.*, U.S. Patent Publication No. 2003/0186694. Sayers *et al.* ‘694 relates to a communication system formed by a private network that includes a private wireless network. The communication system includes a public wireless network using a public wireless protocol, such as GSM, and includes public networks such as PSTN, ISDN and the Internet, using a wired protocol, such as IP. The private network also includes a local area network (LAN) and the private network connects to the public

⁵ Examiner’s comments, Paper No. 12062005, pages 3 through 6.

networks using a wired packet protocol, such as IP. The public and private wireless networks operate with the same public wireless protocol, such as GSM, and the private wireless network additionally operates with a wired packet protocol, such as IP. The communication system permits users to operate freely in both public and private wireless networks using standard mobile stations while achieving high private network data rates. The communication system uses normal wireless handsets or other mobile or fixed stations without need for any modifications.

Ray *et al.* '626 relates to a system and method for improved session management when roaming between access networks (AN) within a data cellular network. In one embodiment, gateway functionality is added to one AN in each subnet. The Gateway AN (GAN) provides session transfer capabilities during a dormant handoff with a source AN located in a different subnet. The GAN is responsible for receiving session information request messages from target AN's within the local subnet, querying other GANs within other subnets to locate the subnet that contains the source AN for the session and routing the session information back to the target Ans. In another embodiment, an extended session is established across several Ans within a subnet. When an Access Terminal (AT) initiates a new extended session, the responsible AN negotiates a common session across the ANs covered by the extended session area. During the session negotiation, each AN establishes a new session and allocates a new Unicast Access Terminal Identifier (UATI). Each AN is notified of each UATI allocated for the extended session. Once the negotiation between ANs is completed, the AT can roam anywhere within the

extended session area without re-negotiating the session or transferring session information.

Akahane '617 relates to a request routing system for offering high-quality, low-priced data delivery services to a large number of users. Request router RRI for redirecting data requests to delivery servers manages the data storage in each delivery server, the MPU load on each delivery server, the delay time involved between delivery servers and terminals, and the bandwidths of data delivery paths between delivery servers and terminals. If a bandwidth required for data delivery cannot be acquired, request router RR1 can perform a calculation to check whether an alternative path can be set between a delivery server and terminal. If the result of the calculation indicates that an alternative path can be set, request router RR1 can explicitly set such a path.

In contradistinction to the Examining staff's proposed combination, claims 1 through 7 contemplate a private wireless high-speed data system providing terminal authentication and call processing when a call is connected between a wireless terminal of a wireless high-speed system (*e.g.*, a CDMA 1x EV-DO) scheme and a private premises EV-DO wireless network. Private EV-DO wireless network authentication and private connection call processing of a terminal are performed using session information of the corresponding terminal registered in the public EV-DO wireless network, while terminal authentication and call processing in a private wireless high-speed data system is effected by a private pDLR adapted to effect authentication of a terminal entering the private network and call processing and arranged within a private EV-DO wireless

network. Session information of the corresponding terminal is received from a data location register (*i.e.*, the DLR) of the public EV-DO network only when the terminal entering the private EV-DO wireless network requests the call connection for the first time and is stored in a database of the private pDLR, and the call processing and authentication are performed. The authentication of the corresponding terminal is performed by extracting an International Mobile Station Identity (*i.e.*, IMSI) of the terminal included in the session information of the corresponding terminal and determining whether the extracted IMSI is registered in a pDLR database of the private EV-DO wireless network; unlike the proposed combination argued by the Examining staff, this advantageously avoids a requirement for a separate AN_AAA in the private EV-DO wireless network. The call processing may then be readily performed by using the session information for the corresponding terminal stored in the private pDLR without a separate authentication procedure when a call connection is requested from the terminal entering the private network at least two or more times.

The Examining staff admits that the primary reference modified by Ray '626 fails to suggest Applicant's private Data Location Register (pDLR) as defined by claim 1.⁶

⁶ "The combination of Sayers and Ray teaches the authentication information service between Private and Public Wireless Network ... [but] is silent on to extract authentication information of the terminal included in the session information of the corresponding terminal received from the public network data location register, to store the received session information of the corresponding terminal in a database upon the extracted authentication information being authentication information of the terminal registered in the private EV-DO wireless network, and to provide the call processor with the corresponding session information". Paper

The reliance by the Examining staff upon modification of its proposed combination to incorporate the use of request router RR1 from Akahane '617 to calculate whether an alternative path may be established between a delivery server and a terminal when a bandwidth necessary for delivery can not be acquired is misplaced, and fails to remedy the deficiencies admitted by the Examining staff's in its proposed combination. Where, by way of example, and in point of fact, how is the Examining staff's proposed combination modified to provide either Applicant's extraction of "authentication information of the terminal included in the session information of the corresponding terminal received from the public network data location register,"⁷ or Applicant's storage of "the received session information of the corresponding terminal in a database upon the extracted authentication information being authentication information of the terminal registered in the private EV-DO wireless network,"⁸ or Applicant's provision of "the call processor with the corresponding session information."⁹ In short, the Examiner's proposed combination fails to make a *prima facie* demonstration of obviousness of the subject matter defined by claim 1 when taken in its entirety. Accordingly, there is no basis of record to justify maintenance of this rejection. It withdrawal is required.

Secondly, recognizing the deficiencies in the proposed combination admitted by

No. 12062005.

⁷ Examiner's comments, Paper No. 12062005, page 4.

⁸ Examiner's comments, Paper No. 12062005, page 4.

⁹ Examiner's comments, Paper No. 12062005, page 4.

the Examining staff, there is neither basis nor motivation in the record of this prosecution history which teaches the modification of the primary reference, Sayers '694; the sole basis of record would be an impermissible hindsight reconstruction of the art in the light provided by Applicant alone. Where, for example, does the proposed combination recognize a need in the art to either "provide the call processor with the corresponding session information" or Applicant's remedy for the need "to meet the increasing demand for the Wireless High-Speed Data System with an efficiency and a low data rates while transfer data from the source to the target"?¹⁰ The teachings of Applicant form no part of the prior art; consequently absent motivation for the modification of the primary reference required by the proposed combination of the Examining staff, withdrawal of this rejection and allowance of independent claim 1, together with claims 2 through 7 depending thereon, is required. Such action is respectfully urged.

In view of the foregoing amendments and remarks, it is submitted that the claims of this application are in condition for allowance, and early issuance thereof is solicited. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's attorney.

A petition for a two-month extension of time and an Applicant's check in the

¹⁰ Examiner's comments, Paper No. 12062005, pages 3 through 6.

amount of \$450.00 drawn to the order of Commissioner accompanies this response.

Should the petition become lost, the Commissioner is requested to treat this paragraph as a petition for an extension of time, and should the check become lost, be deficient in payment, or should other fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "R. E. Bushnell", written over a horizontal line.

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